

Title: Computer modeling of curves

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Abstract: Bachelor thesis *Computer modeling of curves* deals with important curves of computer graphics and their applications in programs.

It is especially devoted to Ferguson cubic, Bezier curve and Coons cubic. The work is outlined as a teaching text. First for high school students of informatics seminar, second for students of geometry. It is also useful as an overview of the theory of curves or a collection of examples relating to study of curves. An important contribution of this work are programs that allow experimental verification of properties of the studied curves. There is also a picture attached to most of curves and examples. Part of this work is an enclosed CD, where you can find all the programs and the picture supplement in the electronic form.

Keywords: curves, modeling, interpolation, approximation, control polygon